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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,815	03/23/2007	Tomohiro Utaka	296396US0PCT	5481

22850 7590 10/03/2007  
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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SMITH, CHAD

ART UNIT	PAPER NUMBER
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2874

NOTIFICATION DATE	DELIVERY MODE
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10/03/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

10/593,815

Applicant(s)

UTAKA ET AL.

Examiner

Chad H. Smith

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-14 is/are rejected.
- 7) ☒ Claim(s) 8-14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 10/593,815.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/24/07</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 8 is objected to because of the following informalities: -claim 1- should read – claim 7-. Appropriate correction is required.
2. Claim 9 is objected to because of the following informalities: -claim 1- should read – claim 7-. Appropriate correction is required.
3. Claim 10 is objected to because of the following informalities: -claim 1- should read – claim 8-. Appropriate correction is required.
4. Claim 11 is objected to because of the following informalities: -claim 1- should read – claim 7-. Appropriate correction is required.
5. Claim 12 is objected to because of the following informalities: -claim 1- should read – claim 8-. Appropriate correction is required.
6. Claim 13 is objected to because of the following informalities: -claim 1- should read – claim 7-. Appropriate correction is required.
7. Claim 14 is objected to because of the following informalities: -claim 1- should read – claim 8-. Appropriate correction is required.

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 7 – 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Koyanagi et al. (JP 2003-147045).

9. Regarding claim 7, Koyanagi et al. teaches a radiation-sensitive resin composition for forming optical waveguides, which comprises: (A) a novolac type epoxy resin represented by the following general formula (1), (2), or (3) in the formula (1), R1 is a hydrogen atom, an alkyl group having 1 to 12 carbon atoms, or an aralkyl group; and n is an integer from 0 to 10 in the formula (2), R2 and R3 are each independently a hydrogen atom, an alkyl group having 1 to 12 carbon atoms, or an aralkyl group; and n is an integer from 0 to 10 in formula (3), R4 and R5 are each independently a hydrogen atom, an alkyl group having 1 to 12 carbon atoms, or an aralkyl group; and n is an integer from 0 to 10 (par. 0008); and (B) a photo-acid generator (par. 0020).

10. Regarding claim 8, Koyanagi et al teaches wherein the component (A) has an epoxy equivalent of 50 to 1,000 g/eq (par. 0008).

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11. Regarding claims 9 and 10, Koyanagi et al. teaches radiation-sensitive resin composition for forming optical waveguides and therefore a cured product of the radiation-sensitive resin composition has a refractive index of 1.55 or more.

12. Regarding claims 11 and 12, Koyanagi et al teaches wherein a cured product of the radiation-sensitive resin composition has a glass-transition temperature of 100 degree C. or higher (par. 0013).

13. Regarding claims 13 and 14 Koyanagi et al teaches an optical waveguide, which comprises a lower clad layer, a core portion, and an upper clad layer, wherein at least one selected from the lower clad layer, the core portion, and the upper clad layer is a cured product of the resin composition (par. 0025 – 0026).

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad H. Smith whose telephone number is (571) 270-1294. The examiner can normally be reached on Monday-Thursday 7:30a.m. - 5:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on 571-270-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chad H. Smith/  
CHS

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Sung H. Pak  
Primary Examiner  
AU 2874